

Those of you who are starting with us with this volume may be interested in a very short history. The Bally Arcade was first advertised by the Chicago mail order house of JS&A in such magazines as Popular Science, Scientific American, the airline freebies and a couple of others in Sept/Oct. of 1977. In the two page ad, delivery was promised in four weeks and the expansion unit was indicated to be available in 6 weeks, so that a complete and highly sophisticated computer would be shortly available at a \$600 price range. The Tiny BASIC showed up in October 1978, and I started this subscription newsletter in Nov. We have yet to see the expansion unit (Add On)(Level III), but in the last year a number of doors have been unlocked in the Tiny BASIC and subscribers, as a group, are the only ones able to expand their programs and enhance their operations. This Newsletter is the only established source of free programs, and provides a place for those wishing to market their outputs.

PRINTER OUTPUT. I GUESS YOU NOTE THE UNUSUAL TYPE IN THIS PARAGRAPH; THIS IS BEING TYPED VIA MY NEW Comprint 9125 PRINTER UNDER DIRECT CONTROL OF THE BALLY. I HOPE TO PRINT MORE OF THE ARCADIAN THIS WAY IN THE FUTURE - THIS IS A SAMPLE TO WHET YOUR APPETITE. THIS MACHINE WAS ADVERTISED ON THE INSIDE FRONT COVER OF THE JULY KILOBAUD. COST IS \$699 RETAIL, BUT I HAVE A SOURCE FOR IT AT \$525 FOB SAN JOSE (PLUS CAL TAX IF APPLICABLE). FULL DETAILS NEXT TIME.

SAUCER BATTLE

BY JOHN HURST

9/79

10 - 100	Initialize and Input mode of play. Draw stars and print scoring.
200 - 290	Draw saucers and allow control by hand controls. Two player game.
300 - 495	One player against computer. Draw saucers, left for player, right for computer. Computer random positioning and movement. Set ups for computer or TR(1) firing.
500 - 530	Set ups for TR(1) or TR(2) firing in two player mode.
540	Back to two player program if neither saucer fires LASER.
600 - 680	Fire left saucer's LASER, if a hit goto blowup routine, if not go back to one or two player routine, whichever is in use.
700 - 780	Same as 600, but for right saucer.
800 - 860	Blowup right saucer, back to main program in use. Upgrade score.
900 - 960	Blowup left saucer, back to main program in use. Upgrade score.
1000 - 1010	Print GAME OVER. If GO key is pressed, goto line 10 to play again.

This game can be played by two or one, (against the computer). Difficulty of hitting target can be selected, 0-1, 0 being the hardest. Amount of LASER blasts and Max Score to win can be selected. If one player option is selected, accuracy of the computer can be set, 0-2, 0 being the most accurate. If the computer fires when accuracy is 0, it will not miss. If both triggers are pulled at the same time, neither will fire, in two player option. If remaining LASER blasts are five or less, an open hole will appear in the center of the saucer that is low on charge. When all charge for LASER is depleted for one saucer, he can no longer fire. If both saucers are depleted of charge, or Max Score is reached by one saucer, game is over. To play again just press GO key.

The memory use of this game is very close to the max available to the Bally, so care should be used when entering this program. Use no spaces unless necessary, the listing may have extra spaces due to my typing. If you don't need them, don't use them. Also deleting lines 1 - 5 can save some memory if needed. Good Luck.

John R. Hurst

bot send add'l \$5 for this year - (subs. is) \$10

back issues \$10.-

PROGRAM NAME SAUCER BATTLE

Line #	Statement(s)	Line #	Statement(s)
1	*SAUCER BATTLE*	720	R(23)=255;R(21)=255
2	.	730	LINE 73,D,4;LINE-75,D,3;L1
3	BY JOHN HURST		NE 0,0,4;R(21)=0;R(23)=0;
5	9/79		IF L=2 IF N=1 GOTO 770
10	F=0;G=0;I=0;J=0;NT=1	740	IF D>K-2 IF D<K+2 GOSUB 900
20	CLEAR;BC=0;FC=126;R(0)=0;	750	BOX 75,D,4,4,2;BOX-75,K,4,
	R(1)=0;R(2)=126;R(3)=0		4,2;IF L=1 GOTO 300
30	INPUT "DIFFICULTY:0+12" N	760	GOTO 200
40	PRINT "HOW MANY	770	IF D>K-3 IF D<K+3 GOSUB 900
50	INPUT "LASER BLASTS" U	780	GOTO 750
60	INPUT "MAX SCORE" H	800	FOR E=1 TO 10;R(9)=37;
70	INPUT "1 OR 2 PLAYERS" L;		R(2)=90
	IF L=1 INPUT "ACCURACY OF	810	FOR P=0 TO 1
	COMPUTER:0+2" M	820	BOX 75+RND(4)-2,D+RND(4)-2
80	CLEAR;FOR A=1 TO 50;B=RND(830	9,2,2,3;NEXT P
	130)-65;C=RND(88)-44		MU="";NEXT E;R(2)=126;
90	BOX B,C,1,1,1;NEXT A;CX=		R(9)=50
	-17;CY=40;PRINT "SCORE"	840	J=J+1;CX=-77;CY=32;PRINT
100	CX=-77;CY=32;PRINT #10;J;		#10;J
	#0;I;IF L=1 GOTO 300	850	IF J=H GOTO 1000
200	K=KN(1)÷4-6;D=KN(2)÷4-6	860	BOX 75,D,10,10,2;RETURN
210	BOX-75,K,4,4,3;BOX 75,D,4,	900	FOR E=1 TO 10;R(9)=4;FC=90
	4,3	910	FOR P=0 TO 1
220	IF F>=U-5 BOX-75,K,2,2,3	920	BOX-75+RND(4)-2,K+RND(4)-
230	IF G>=U-5 BOX 75,D,2,2,3		2,0,2,3;NEXT P
240	IF F>=U-5 BOX-75,K,2,2,3	930	MU="";NEXT E;FC=126;R(9)=
250	IF G>=U-5 BOX 75,D,2,2,3		50
260	BOX-75,K,4,4,3;BOX 75,D,4,	940	IF I+1;CX=-17;CY=32;PRINT I
	4,3	950	IFI=H GOTO 1000
270	IF F=U IF G=U GOTO 1000	960	BOX-75,K,10,10,2;RETURN
280	IF (TR(1))-(TR(2))GOTO 500	1000	CX=-23;CY=0;PRINT "GAME
290	GOTO 200		OVER
300	D=RND(76)-38	1010	R=KP;IF R=13 GOTO 10
310	K=KN(1)÷4-6;D=D+RND(10)-5		
320	IF D>25 D=25		
330	IF D<38 D=-38		
340	BOX-75,K,4,4,3;BOX 75,D,4,		
	4,3		
350	IF F>=U-5 BOX-75,K,2,2,3		
360	IF G>=U-5 BOX 75,D,2,2,3		

ANOTHER PRINTER has been successfully connected to the Bally, writes John Hurst. He has a Victor Model 1250 that uses 3 3/4" wide adding machine tape, with 34 characters per line. John sent some sample material, but the print was blue and wouldn't reproduce. He also needs the little converter that was shown on p.47 of Vol. 1.

NOSTALGIA for those who can recall some of the older Bally gaming machines. This antique was included in an auction held at Disneyland in late November.



Bally Sparkplug Paying
Horse Race Game.

DECIMAL DIVISION is a version by Laurence Gallant that will give you up to 32,676 decimal places (the variable Z).

PROGRAM NAME LOGO	
Line #	Statement(s)
1	DECIMAL DIVISION
5	BY L. GALLANT
10	INPUT X,Y,Z
20	A=X÷Y
30	PRINT #1,A,#1,"."
40	FOR B=1 TO Z
50	E=(RM*10)÷Y
60	PRINT E,
70	NEXT B
10	CLEAR
20	R(9)=37
30	BC=250;FC=7
40	FOR A=1 TO 150
50	H=RND(160)-80;V=RND(80)-44
60	BOX H,V,1,1,RND(2)
70	NEXT A
80	R(9)=85;R(1)=250
90	R(2)=108;R(11)=250
100	CX=-44;CY=0
110	PRINT"ARCADIAN
120	LINE 0,0,4
130	FOR Q=0 TO 35 STEP 2
140	LINE 75,Q,3;LINE 0,0,4
150	LINE 75,-Q,3;LINE 0,0,4
160	NEXT Q
170	L=7;FOR Z=48 TO 51
180	BOX -Z,0,1,L,1
190	L=L-2
200	NEXT Z
210	BOX -22,0,50,9,3
220	FOR Q=0 TO 35
230	LINE 75,Q,3;LINE 0,0,4
240	LINE 75,-Q,3;LINE 0,0,4
250	NEXT Q
260	GOTO 220

LOGO shown at the head of page ONE is based on an idea by Guy McLimore, and embellished by myself. If you'd like to see it in action (literally) and in living color, the program is included.

—arcadian—

PROGRAM REVIEWS are being covered in detail in this first issue of Vol.2 in order to act as a reference base for future material. Dick Houser 635 Los Alamos Ave., Livermore, CA 94550 is heading up a team consisting of

Steve Wilson	18015 Sally Ave.	Cleveland OH 44135
Don Daniels	3 Apex Road	Melville NY 11746
Bill Rueger	336 Beach 38th St	Far Rockaway NY 11691
Phil Shafer	3708 Big Horn Trail	Plano TX 75075

These gentlemen will accept programs which are offered FOR SALE by various vendors, and will subject the programs to hands-on operation, review these and then report their findings on the quality of subject matter, documentation, etc., per the form shown on page FOUR. The reviews that appear in the ARCADIAN will be abbreviated to show only the rating answers. Program vendors are being contacted directly by Dick, based on ads run previously. If you are a 'new' vendor, please drop him a line if you are interested in having impartial reviews of your product.

CORRECTIONS of previous programs:

Dick Nitto, who wrote the article "Have a Ball with Bally" in the latest KILOBAUD writes about dropouts in two of the lines in the program he had included there- They should read

```
270 GOSUB 440; IF G=1 GOTO 330
280 IF S=0 R=R+1; GOTO 330
```

He also writes that an easier version is possible if you substitute

```
260 IF X<3 IF X>-3 IF Y<3 IF Y>-3 GOTO 300
440 IF X<4 IF X>-4 IF Y<4 IF Y>-4 A=520; G=1; GOTO 460
```

MICROTREK needs to be corrected to

```
200 CLEAR; C = E-S; IF C 0 C=-C
220 Q=0; IF C 2 IF G 2 Q=1
```

and Bill Templeton suggests the following color commands for enhancement. Insert them in each line just before the RETURN command -

```
700 FC = 0;
710 FC = 90;
720 FC = 172;
730 FC = 133;
```

SPACE WAR as printed on p.79 had two points needing work, writes John Johnson. The asterisk (*) in lines 300 and 500 should be changed to the x for multiplication. In line 820, the Y-5 should be T-5

RESEQUENCING apparently does not work on all machines. We noted on p. 25 that there were at least two variations of Bally software. We'll work on this to see what changes might have to be made.

CHECKER as modified on p.90 has a typo of mine, in that the @(5) in line 260 should be @(S).

TUTORIAL (3) on p.41 is called a real space saving help by John Collins, who suggests adding an equals sign to line 9030 so that it reads

```
9030 PRINT #1,"=",/(20076 + (Zx2))
```


arcadian

REVIEW FORM

This form is used by the reviewer in doing his job, showing what things he will be looking for and the gradations possible. The very bottom of the form is what will appear in the ARCADIAN. You can refer back to this page to refresh your memory on the ratings.

Source Code _____ Cassette Code _____ Program Code _____ BPRF4

BALLY PROGRAM REVIEW

Date: _____
 Name of Program: _____ Cassette Name: _____
 Description: _____
 Source: _____ Price: _____
 Reviewed by: _____ Age: _____

Circle score for each item 0 1 2 3 4 5 6 7 8 9 on scoring line.

PROGRAM DOCUMENTATION (PD)

No Instructions 0 1 2 3 4 5 6 7 8 9 Very Clear Description
 Listing, Flowchart, Instructions

PROGRAM POLISH (PP)

Sloppy, Amateurish 0 1 2 3 4 5 6 7 8 9 Professional

USE OF SPECIAL FEATURES (USF)

Minimal Used 0 1 2 3 4 5 6 7 8 9 Great Use of Features
 Graphics, Sound, Handles

LEVEL OF CHALLENGE (LC)

Not Challenging 0 1 2 3 4 5 6 7 8 9 Very Challenging

ORIGINALITY AND CREATIVITY (OC)

Adapted, Same Old Stuff 0 1 2 3 4 5 6 7 8 9 Totally Brilliant and Unique

LEVEL OF INTEREST (LI)

Boring 0 1 2 3 4 5 6 7 8 9 Fascinating

EDUCATIONAL VALUE (EV)

Little 0 1 2 3 4 5 6 7 8 9 Really Learn Facts
 and Skills

EASE OF USE (EU)

Awkward, Inconvenient 0 1 2 3 4 5 6 7 8 9 Easy, Quick, Convenient

OVERALL VALUE (OV)

Almost Worthless 0 1 2 3 4 5 6 7 8 9 Everyone Should Buy

.....
 Name of Program: _____ Cassette Name: _____
 Description: _____
 Source: _____ Price: _____
 Reviewed By: _____ Age: _____
 Ratings : PD=___ PP=___ USF=___ LC=___ OC=___ LI=___ EV=___ EU=___ OV=___ TP=___ SZ=___
 Time to Play _____ For Ages _____ # of Players _____

"ARCADE DICE" by KLAUS GRISWAYER

```

1. ARCADE DICE
2. BY K.F.O.
3. RETURN
50 CLEAR; NT=0; FC=84; BC=24
10 PRINT; PRINT " * * * ARCADE DICE * * *
20 PRINT; PRINT; PRINT " 1 ELECTRONIC DICE
30 PRINT; PRINT " 2 ELECTRONIC CRAPS GAME
40 PRINT; PRINT; PRINT " MAKE SELECTION
50 IF &(23)=8 CLEAR; GOTO 100
60 IF &(22)=8 CLEAR; K=1; T=0; GOTO 150
70 GOTO 50
100 GOSUB 780; INPUT # OF PLAYERS: "P; IF P>4 P=4
110 IF P=1 K=1; GOSUB 800; GOTO 110
120 GOTO 700
140 CX=-75; CY=40; RETURN
150 NT=1
160 BOX 0, 30, 80, 9, 2
170 BOX 0, 40, 160, 8, 2
180 W=((KN(1)+128)/28)+1
190 IF &(22)=16 GOTO 5
200 GOSUB 140; PRINT " BET: $", #3, M,
210 IF TR(1)=0 GOTO 180
220 GOSUB 800
230 GOSUB 500
240 S=L+R
250 IF S=7 GOSUB 510; GOTO 600
260 IF S=11 GOSUB 510; GOTO 600
270 IF S=2 GOSUB 520; GOTO 400
280 IF S=3 GOSUB 520; GOTO 400
290 IF S=12 GOSUB 520; GOTO 400
300 GOSUB 500; PRINT " ROLL AGAIN",
310 GOSUB 800
320 GOSUB 500
330 A=L+R
340 IF A=S GOSUB 530; GOTO 600
350 IF A=7 GOSUB 540; GOTO 400
360 GOTO 310
400 GOSUB 140; PRINT " # # # YOU LOSE # # #
410 NT=8
420 MU=49; MU=51; MU=53; MU=98; MU=49; MU=48; MU=53;
    MU=98; MU=49; MU=48; MU=48; MU=48; MU=48
430 NT=0

```

```

440 CX=-75; CY=40; PRINT " LOST $", #3, M,
450 M=-M
460 GOTO 550
500 CX=-20; CY=30; RETURN
510 PRINT " A NATURAL", RETURN
520 PRINT " CRAPS", RETURN
530 PRINT " A MATCH ", RETURN
540 PRINT " CRAP OUT ", RETURN
550 T=T+M
560 CX=0; PRINT " YOU HAVE $", #3, T,
570 FOR Z=1 TO 100
580 Y=Y+1; NEXT Z; I=0
590 GOTO 150
600 GOSUB 140; PRINT " $$$$$$ A WINNER $$$$$$
610 NT=8
620 FOR Z=1 TO 2
630 MU=51; MU=48; MU=53; MU=48; MU=51; MU=52;
    MU=48; MU=53; MU=48; MU=48; MU=48; MU=48
640 NEXT Z; NT=0
650 CX=-75; CY=-40; PRINT " WIN $", #3, M,
660 GOTO 550
700 FOR K=1 TO 43; @ (K) = 0; NEXT K
710 FORK=1 TO P
720 GOSUB 780; PRINT " PLAYER #", #2, K, " ROLLS",
730 GOSUB 800; @ (K) = L+R; NEXT K
740 FORK=1 TO P
750 IF @ (K) > @ (K+1) IF @ (K) > @ (K+2) IF @ (K) > @ (K+3)
    GOSUB 780; PRINT " PLAYER #", #2, K, " WINS ", ;
    GOTO 710
760 NEXT K
770 FOR Z=1 TO 200
780 CX=-40; CY=-40; RETURN
800 N=7-((KN(K)+128)/42)
810 NT=1; IF &(22)=16 GOTO 5
820 CX=0; CY=40; PRINT " # OF ROLLS: ", #2, N,
830 IF TR(K)=0 GOTO 800
840 NT=20; FOR Z=1 TO N
850 BOX 40, 0, 44, 44, 1; BOX 40, 0, 42, 42, 2
860 L=RND(6); X=-40; GOSUB 890+(L*10)
870 BOX 40, 0, 44, 44, 1; BOX 40, 0, 42, 42, 2
880 R=RND(6); X=-40; GOSUB 890+(R*10)
890 NEXT Z; NT=1; RETURN

```


LINES 800 - 830 selects number of times
 dice roll
 LINES 840 - 890 roll dice (random selection)
 and draws frame for dice
 LINES 900 - 950 select dot combinations
 LINES 960 - 990 draw dots on dice

ARCADE DICE is played with the hand
 controls. First menu selection allows up
 to four players to play in rotation, just
 enter the number of players, then press go.
 Number of rolls is selected by knob on hand
 control, pulling the trigger will begin the
 rolling. After the combination is displayed,
 control shifts to the next hand control.
 After everyone has their turn, the winner is
 immediately selected.

The second menu selection allow player
 to place bet with knob and trigger, then
 number of rolls is selected as above. Score
 is automatically indicated.

To return to menu, press Zero (0) on
 keypad. This can only be done during sel-
 ection stages of rolls or bet, which reset
 automatically.

This program can be modified using
 the separate sections in other combinations,
 or modifying the size and location of the dice.
 Electronic dice can replace regular dice in
 board games, by keeping track of whose turn
 it is (everyone gets their own control, but
 cannot move out of turn). I hope this will
 give someone certain possibilities.

YOURS TRULY,

Klaus Griswader

KLAUS GRISWAIER
 320 Hanna Ave., Bldg. 3, Apt. 8
 LOVELAND, OH 45140

900GOSUB960;RETURN
 910GOSUB970;RETURN
 920GOSUB960;GOSUB970;RETURN
 930GOSUB970;GOSUB980;RETURN
 940GOSUB960;GOSUB970;GOSUB980;RETURN
 950GOSUB970;GOSUB980;GOSUB990;RETURN
 960BOX X,0,6,6,1;RETURN
 970BOX X+12,12,6,6,1;BOX X-12,-12,6,6,1;
 RETURN
 980BOX X-12,12,6,6,1;BOX X+12,-12,6,6,1;
 RETURN
 990BOX X-12,0,6,6,1;BOX X+12,0,6,6,1;RETURN

Keep all the spacing tight (except
 inside the quotation marks, they should be
 as shown above) even though it was typed
 a little inconsistently. The program uses
 almost all of the BASIC UNIT's memory. The
 command PRINT SZ must indicate at least 14,
 if not, eliminate lines 1 & 2.

The program operates as follows:

LINES #1 - 70 set up the menu
 LINES 100 - 120 selects the number
 of players for electronic
 dice

LINES 140 - 210 sets up player bet for
 craps game
 LINES 220 - 360 compares the numbers rolled
 on the dice, determining both
 winning and losing combinations
 LINES 400 - 460 is the loser routine for craps
 LINES 500 - 540 specify winning and losing
 combinations
 LINES 550 - 590 give player total and returns
 for next bet
 LINES 600 - 660 is the winner routine for craps
 LINES 700 - 730 enters each player's roll on
 electronic dice
 LINES 740 - 780 selects the winner for electronic
 dice (highest combination)

MACHINE ACTING UP? Most of us have had problems of intermittent failure, garbage on the screen, keypad or controller malfunction, etc. Bally has set up a number of service centers around the country, primarily to take care of their commercial arcade machines, and most problems are solved by a simple swap of units. New units didn't always work and so some subscribers have had 5,6, or 7 units before they got a good one. I'm on #3 myself. Gunther Dorth, 154 Cornell Ave., Des Plaines, IL 60016 has volunteered to act as a clearing house, requesting information from those of you who have had problems, had them solved, still have them, etc., etc. When writing, send him your serial number.

POKE program that does funny things was sent in by Dick Martin. It keeps changing its own line numbers, and other stuff....

```
10 INPUT A
20 %(A)=A
30 TV = %(A)
40 GOTO 10
```

TAPE PROGRAM PURVEYORS might be interested in trying this idea I had the other day - How about a vocal description prior to the program itself, and then some vocal instructions after the program has been loaded. Put some suitable instructions where they will help.

ADS: Sell Bally Computer System complete, includes Panzer/Baron, Clowns, Breakout, Football, Star Battle, Blackjack, Baseball and 4 joysticks. Best offer about \$300. Brand New. Mark Turmell, 4691 S. Elm Dr. Bay City, Mich, 48706
517-684-9189

Listing only for Chuck-a-Luck, a one-player gambling game with graphics.
\$1 and self-addressed envelope to Al Nowak, 10632 S. Kenneth, Oak Lawn IL 60453

CORRECTION to the Handbook (sample page on p.83) noted by Chuck Thomka. On p.109, the labels of columns MC0 and MC1 should be reversed. The same table is properly shown on p.123

EIGHT

ARCADIAN

Robert Fabris, PRINTER
3626 Morrie Dr.
San José, CA 95127

FIRST CLASS